

**UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK**

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STEPHANIE WEDRA, on behalf of herself and all	:	
others similarly situated,	:	
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Plaintiff,	:	
	:	Civil Action No.: 7:19-cv-03162-VB
v.	:	
	:	
CREE, INC.	:	
	:	
Defendant.	:	
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**MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT CREE, INC.'S MOTION
TO STRIKE EXPERT REPORT AND OPINIONS OF GARY ALLEN PH.D.**

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In an attempt to demonstrate the commonality and predominance requirements of Rule 23(b)(2) and (3), Ms. Wedra offers the opinions of Gary Allen, Ph.D. that Cree LED lamps can be commonly analyzed for defects. Dr. Allen offered nearly identical opinions in *Young v. Cree*, 4:17-cv-06252-YGR, which the court resoundingly excluded in their entirety because Dr. Allen employed “made-up methodology” that was “not shown to be at the appropriate level of intellectual rigor required to meet the *Daubert* standard.” 2021 WL 292549 at *9-10 (N.D. Cal. Jan. 28, 2021).¹ Here, as in *Young*, Dr. Allen employed non-standard, untested methodologies conjured up purely for the Cree litigation that are “not based on any accepted practices, and are, in fact, the opposite of” the “ample accepted peer-reviewed and vetted industry standards for reliability testing” of LED lamps. *Id.* at *11. Although Dr. Allen made some superficial tweaks to his report and added references to inapplicable third-party studies of LED lamps, these inconsequential revisions do not salvage his hopelessly unreliable opinions. This Court should exclude Dr. Allen’s opinions just as the *Young* court did.

I. SUMMARY OF DR. ALLEN’S REPORT

To support their positions that class treatment is appropriate for claims of purchasers of Cree LED lamps who experienced premature failures, Mr. Young and Ms. Wedra both hired Dr. Allen, a former GE Lighting employee. Dr. Allen performed physical testing for the *Young* matter, and used those same test results in this matter. Specifically, Dr. Allen analyzed 10 Cree LED lamps and opined that Cree LED lamps can be commonly analyzed in four groups based on “lamp architecture,” and that all Cree LED lamps suffer from a defect that will cause the lamps to fail within a set amount of time. In California, Dr. Allen opined that all Cree LED lamps would fail

¹ A copy of Judge Yvonne Gonzalez Rogers’ opinion in *Young* is attached to this Motion as **Exhibit 1**. Mr. Young subsequently filed a Rule 23(f) petition seeking permission to appeal, and the Ninth Circuit denied the petition on April 15, 2021. A copy of the denial is attached as **Exhibit 2**.

within one year; here, Dr. Allen opines that all Cree LED lamps will fail within 6,000 hours of operation. In California, Dr. Allen opined that Cree lamps would suffer from both catastrophic and parametric failures as a result of this purported common defect, now—based on the same testing—Dr. Allen opines that Cree lamps will suffer from catastrophic failures only. In California, Dr. Allen was not permitted to “rebut” Cree’s reports by supplementing his initial report to cite to third-party studies; Dr. Allen includes those studies in the instant report, but as set forth below, those studies are miscited and inapplicable.

a. Dr. Allen’s “Lamp Architectures” Methodology and Opinion

Dr. Allen opines—without physically inspecting even a single Cree LED lamp—that the entire suite of Cree LED Lamps that Cree designed and manufactured over a 6-year span are sufficiently similar such that the Lamps will all perform the same way within certain broad categories. Expert Report of Gary R. Allen, PhD (Dkt. # 63-1, “Allen Rep.”) at 3, 64-66; Deposition Transcript of Dr. Gary Allen in *Young v. Cree*, 4:17-cv-06252-YGR (N.D. Cal.) (“Allen Tr. I”) 40:18-42:14.² Dr. Allen so concluded by using a convoluted and inconsistent methodology that he devised for the purpose of the *Young* litigation: analyzing PDF packages of 30 Cree LED Lamps, and then grouping the lamps into “design groups” and again collapsing the lamp types into “lamp architectures.” *Id.*

First, Dr. Allen opined that Cree’s A19, A21, and BR30 Lamps could be grouped into three “basic” Lamp designs: Filament Tower, 4Flow, and BR. Allen Rep. at 2-3 (Tables 2-3), 64-66. Then, within those “basic” Lamp designs, Dr. Allen identified seven “Cree LED Lamp Designs,”

² Cree deposed Dr. Allen previously in *Young v. Cree*, 4:17-cv-0625-YGR, filed by Plaintiff’s counsel before the United States District Court for the Northern District of California. Pursuant to an agreement between the parties, documents produced in discovery and deposition testimony provided in *Young* may be used in this matter. Excerpts of Dr. Allen’s prior deposition transcript are cited as “Allen Tr. I” and are attached as **Exhibit 3**. Cree deposed Dr. Allen again in this case; excerpts of that testimony are cited as “Allen Tr. II” and are attached as **Exhibit 4**.

which he designated using the shorthand “FT” for Filament Tower, “4F” for 4Flow, and “BR,” followed by a numerical designation for the Lamp’s wattage. *Id.* Dr. Allen then collapsed these seven “Cree LED Lamp Designs” into four groups by “Lamp Architecture,” “based on their fundamental design architecture and visual appearance” as shown in packaging images: “FT21,” which consists of A21 Filament Tower lamps; “FT19,” which consist of 40W and 60W A19 Filament Tower Lamps, “4F19,” which consists of 4Flow A19 Lamps; and “BRHS,” which consists of one BR lamp. Allen Rep. at 2-3 (Tables 2-3), 64-66; Allen Tr. I 38:12-42:14.

Next, Dr. Allen opined that Cree LED Lamps were identical across Lamp Architectures that that he could determine the lifetime reliability of any Cree LED Lamp by analyzing a sample of any other lamp that fell within the same “Lamp Architecture.” Allen Rep. at 3. Dr. Allen concluded that this scheme that he developed solely for the purpose of this litigation was appropriate based on his review of packaging alone, without physically inspecting a single Cree LED lamp. Allen Rep. at 64-66.

Dr. Allen only inspected physical samples of Cree LED Lamps after he concluded that he only needed to analyze one Lamp per “Lamp Architecture.” After that point, Dr. Allen purchased the 10 Cree LED Lamps that he analyzed from third-party internet retailers. These 10 Cree LED Lamps represented five of the seven “Cree LED Lamp Designs” that Dr. Allen identified. In sum, Dr. Allen analyzed four FT19 lamps, two FT21 lamps, two 4F19 lamps, and two BR lamps, which constitute five of his seven “Cree LED Lamp Designs,” and opined that he could extrapolate his conclusions across every Cree LED Lamp that Cree has ever manufactured and sold. Allen Report at 2-3 (Tables 2-3), 64-66. Dr. Allen concluded that he did not need to analyze all seven “Cree LED Lamp Designs” because he had analyzed at least one lamp from each “Lamp Architecture.” Allen Rep. at 3, 64-66. Dr. Allen admitted that he did not take into consideration that there are

various generations of each “Lamp Architecture,” but rather analyzed samples from only one or two manufacturing weeks. Allen Tr. I 44:18-45:14; 88:12-89:6. Nor did Dr. Allen analyze whether Cree LED Lamps used different components across generations, or within a single generation, which he could have done by reviewing bills of materials—or lists of components—that Cree produced in discovery and to which Dr. Allen had access. Allen Tr. I 50:14-51:13.

b. Dr. Allen’s “Target Maximum” Methodology and Opinion Regarding Common Failure

Having selected 10 samples across the four Lamp Architectures, Dr. Allen then analyzed the thermal characteristics of the chosen 10 Cree LED Lamps by taking infrared images and temperature measurements of certain basic components and subsystems that are found in all LED lamps, regardless of manufacturer or manufacture date. Allen Rep. at 25-31. Although Dr. Allen acknowledged that to truly test the expected lifetime of Cree LED lamps he would have needed to perform extended reliability testing on a large number of Cree LED Lamps, Dr. Allen did not do so. Allen Tr. I 18:6-15. Rather, Dr. Allen determined the “expected reliability and lifetime” of Cree LED Lamps by measuring temperatures at three thermally important locations on 10 operational Cree LED Lamps after operating the lamps for approximately 2.5 hours: the (i) heat sink; (ii) electrolytic capacitor; and (iii) PCB, upon which LEDs are soldered. Allen Rep. at 25-31. Notably, none of the Cree LED Lamps that Dr. Allen tested catastrophically failed during his inspection. *See generally* Allen Rep.; Ex. 1 at *6 (“Importantly, Dr. Allen’s report did not reveal that any of the Cree LED lamps that he tested catastrophically failed during his testing.”).

Dr. Allen then compared those temperature measurements to arbitrary “Target Maximum” temperatures that—in Dr. Allen’s personal opinion—are “good design guidelines” for LED lamp design. Allen Rep. at 30. Dr. Allen’s Target Maximums are arbitrary. Component manufacturers typically publish specification sheets that state the maximum operating temperature at which the

component should operate in order to achieve a target lifetime. Vollers ¶ 79. Dr. Allen's Target Maximums are as much as 20° C—or 68° F—below the rated temperature for these components. Allen Rep. at 41-44. Dr. Allen admits that he did not select his Target Maximum temperatures based upon any industry standard or product specification, and that there is no literature, industry standard, or peer-reviewed material that supports his Target Maximums. Allen Rep. at 66; Allen Tr. I 111:24-112:13. Rather, Dr. Allen selected his Target Maximums using his conservative design preferences. Allen Rep. at 32; Allen Tr. I 111:10-15.

Specifically, Allen opines that he personally believes that the LED junction temperature, which is measured at the PCB onto which LEDs are soldered, should not exceed 105° C for Cree LED Lamps. Allen Rep. at 32. Dr. Allen selected this Target Maximum even though the LEDs used in the Cree LED Lamps Dr. Allen evaluated are rated to exceed 25,000-hour ENERGY STAR requirements at 125° C. *Id.* For the electrolytic capacitor, Dr. Allen selected either 72° C or 82° C as the Target Maximum (depending on the specific capacitor evaluated), even though the specific electrolytic capacitors he evaluated have a 25,000 hour rated lifetime at 92° C. Allen Rep. at 32-33. For the heat sink, Dr. Allen noted that there is no industry standard for the maximum operating temperature of a heat sink, but that he adopted a “personal guideline” to strive to keep the heat sink temperature below 75° C in order to keep the “touch point,” or temperature of the exterior of an operating bulb, sufficiently low, for the sole purpose of ensuring that a consumer can comfortably touch the lamp's exterior. Allen Rep. at 33.

Allen performed measurements of the PCB, heat sink, and electrolytic capacitor when the Cree LED Lamps had operated in 25° C (77° F) ambient air, and extrapolated those temperatures to expected performance at 45° C (113° F) ambient air. Allen Rep. at 41-46. Dr. Allen then compared both of these measurements against his personal Target Maximums to evaluate Cree's

design, and concluded that some of the Cree LED Lamps would exceed his selected Target Maximums for those three components when operated at 25° C (77° F), and all would exceed his Target Maximums when he extrapolated measurements to 45° C (113° F). Allen Rep. at 3, 41-46.

Using these comparisons, Dr. Allen next calculated the difference between the expected lifetime of a Cree LED Lamp and his “conservative target design” that would have used his Target Maximums, by applying what he refers to as the “rule-of-thumb:” “a[n operating] temperature increase of 10°C is generally accepted as cutting the life of [an electronic component] in half.” Allen Rep. at 28. Dr. Allen used his Target Maximum temperatures to calculate the purportedly shortened life under his “rule of thumb.” Allen Rep. at 42-44. In other words, Dr. Allen assumed a theoretical lamp designed with his Target Maximums would have an ideal lifetime, and then reduced that lifetime using actual measurements of Cree LED Lamps.

Dr. Allen focused particular attention on the electrolytic capacitor, and opined that the operating temperature of Cree LED Lamps would cause the electrolytic capacitors to fail prematurely. Allen Rep. at 44. Dr. Allen then opined that Cree LED Lamps “will commonly experience catastrophic failure in advance of the advertised product life,” and specifically, that Cree LED Lamps will fail in less than one year (in California) or less than 6,000 hours (in the instant case). Allen Rep. at 4.

Dr. Allen has twice changed his opinion with respect to whether all Cree LED Lamps within one Lamp Architecture will commonly fail. In Dr. Allen’s opening report in California, he opined that all FT19 Lamps, including the 40W replacement, would fail prematurely. Expert Report of Gary Allen, PhD filed in *Young v. Cree* (“*Young Rep.*,” attached as **Exhibit 5**) at ¶¶ 3, 15, 44. Dr. Allen then issued a rebuttal report in *Young* in which he made an abrupt about-face, opining that the 40W FT19—which Dr. Allen also refers to as the FT6.0 lamp type—“is not

overheated enough for [him] to opine that it will fail prematurely.” Rebuttal Report of Gary Allen, PhD filed in *Young v. Cree* (“*Young* Rebuttal Rep.,” attached as **Exhibit 6**) at ¶ 21, 78 (“The Allen Report did not opine that the FT6.0 LED Lamp would experience early failure.”). Now, Dr. Allen has changed his opinion yet again, and opines that the FT6.0 lamp type will fail prematurely. Allen Tr. II 90:23-92:21. This was likely an effort to fix a fatal flaw that the *Young* court identified: “[i]t is unsurprising therefore that Dr. Allen concedes in his Rebuttal Report that some of the lower wattage LED lamps in some of the Designs and Architectures do not in fact fail, despite placing them within the same groups as higher wattage models and versions.” Ex. 1 at 17.

c. Third-Party Studies

In addition to his own testing that he performed in California and repurposed for this action, Dr. Allen added to his Report lengthy summaries of two third-party studies that analyze the test condition of on-off switching on LED lamps, as well as a CLE presentation that summarizes those two studies: (a) California Public Utilities Commission, “2013-2014 Work Order ED_I_Ltg_1, LED Lab Test Study Final Report” (2017) (“CPUC Study”); (b) N. Narendran et al., “Projecting LED Product Life Based on Application,” (2016) (“Narendran Study”); and (c) N. Narendran, et al. “LED Lighting Product Life and Failure: Why We Need New Test Methods for Accurate Life Reporting in Applications,” (2018) (“Lightfair Presentation”).³ Allen Rep. at 10-24, 72-76. Dr. Allen did not participate in the CPUC or Narendran Studies or draft the Lightfair Presentation.

In the CPUC Study, the researchers tested 666 LED lamp samples comprising 105 models of LED lamps, attempting to simulate normal residential use by switching lamps on and off for a total of 4,500 hours, and conducted post-mortem analysis of failed lamps. Allen Rep. at 10; Vollers

³ Dr. Allen did not provide the Court with the studies he cites, so Cree attached them to the Declaration of Jon Vollers as Exhibits 19-21.

¶ 129. The lamps in the CPUC Study were anonymized and identified only by make number. The CPUC Study contains significant limitations on its application to real-world residential applications, and explicitly states that its results should not be extrapolated to quantify LED lifetimes. Declaration of Dr. Paul Morgan Pattison (“Pattison”) ¶ 116. In the Narendran Study, the researchers tested 90 samples of 75-watt replacement lamps by cycling them on and off at two- or four-hour intervals for thousands of hours. *Young Rebuttal Rep.* ¶ 70; Vollers ¶¶ 149, 154. The Narendran Study, as Dr. Allen admits, did not include Cree LED Lamps. Allen Rep. at 73. Both studies concluded that some lamps fail prematurely after being subjected to extended on-off switching. Vollers ¶¶ 152, 44. The Lightfair Presentation is a continuing-education presentation that summarizes the CPUC and Narendran Studies. Vollers ¶¶ 122-25; Pattison ¶ 118.

II. ALL OF DR. ALLEN’S OPINIONS ARE UNRELIABLE AND SHOULD BE EXCLUDED.

Dr. Allen’s Report contains three opinions: (i) Cree LED Lamps are similar enough within Dr. Allen’s four “Lamp Architectures” that they can be commonly evaluated for purported defects; (ii) Cree LED Lamps within each of the four “Lamp Architectures” suffer from a common defect and will fail within 6,000 hours; and (iii) third-party studies using on-off switching prove that Cree LED lamps will commonly fail prematurely. Allen Rep. at 3. Dr. Allen’s first two opinions are inadmissible because Dr. Allen invented his methodology and it is not peer-reviewed, tested, or generally accepted in the LED lighting community. Even if Dr. Allen’s methodologies were sound, those opinions are inadmissible because Dr. Allen did not rely upon sufficient facts or data or apply his methodologies reliably to the facts of this case. And Dr. Allen’s opinions with respect to third-party studies mislead the factfinder because they rely on inappropriate speculation, ignore the studies’ stated limitations, and improperly apply California-specific results to New York.

a. Applicable standard.

Expert testimony is not admissible unless it “both rests on a reliable foundation and is relevant to the task at hand.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 597 (1993) (“*Daubert I*”). In order to be admissible, expert testimony must be (i) based upon sufficient facts or data; (ii) the product of reliable principles and methods, and (iii) applied reliably to the facts of the case. Fed. R. Evid. 702. For scientific opinions like Dr. Allen’s, the opinion must be based upon scientifically valid principles. *Daubert I*, 509 U.S. at 589. Ms. Wedra bears the burden of proving the admissibility of Dr. Allen’s opinion. *Id.* at 593 n.10.

A. Dr. Allen’s Lamp Architecture scheme is not the product of reliable principles or methods.

Dr. Allen testified that he personally developed his method of dividing Cree LED Lamps into “Lamp Architectures” for the purpose of common evaluation. Allen Tr. I 42:11-14. Dr. Allen’s methodology consisted solely of reviewing PDF images of packaging for Cree LED Lamps and analyzing the Lamps’ design architecture and visual appearance in the images. Allen Rep. at 64-66. Dr. Allen’s methodology is thus woefully insufficient under *Daubert*. Ex. 1 at *9 (“Even if one could justify the expediency in categorizing LED lamps by merely reviewing packaging and photos, Young has failed to show that Dr. Allen’s methods of broad extrapolations and temperature measurements are ‘generally accepted in the relevant engineering community,’ especially where the comparative metric itself is self-created. Nor is it probable that he can.”).

To determine whether a scientific opinion is sufficiently reliable to be admissible, the Court must “analyze not what the expert[] say[]s, but what basis they have for saying it.” *Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1216 (9th Cir. 1995)(“*Daubert II*”). Scientific methodology can be reliable if: (i) the methodology can and has been tested; (ii) the methodology has been subjected to peer review; (iii) the known or potential rate of error for the technique has been addressed; or (iv) the methodology has a general degree of acceptance in the relevant

scientific community. *Daubert I*, 509 U.S. at 593-94.

Dr. Allen’s methodology does not demonstrate any of the above indicia of reliability. There is no indication that Dr. Allen’s methodology of Lamp classification has been tested or subjected to peer review or that the lighting community has accepted Dr. Allen’s methodology. Allen Tr. I 42:11-14.⁴ In the six pages in which Dr. Allen describes his methodology, he does not cite to even one source, publication, or industry standard that supports his methodology. Allen Rep. at 25-31. Dr. Allen’s failure to cite to any objective indication that his methodology is scientifically valid is fatal. *See, e.g., Wills v. Amerada Hess Corp.*, 379 F.3d 32, 39-40 (2d. Cir. 2004)(affirming exclusion of an opinion that was not tested or subjected to peer review and for which there was no known error rate); *Zaremba v. Gen. Motors Corp.*, 360 F.3d 355, 358 (2d Cir. 2004)(excluding an expert’s testimony when the expert’s design had not been subject to peer review or publication, the design did not have a “known rate of error,” and the expert failed to show general acceptance of his methodology); *see also Daubert II*, at 1315-16 (“The expert’s bald assurance of validity is not enough; Rather, the party presenting the expert must show that the expert’s findings are based on sound science, and this will require some objective, independent validation of the expert’s methodology.”).

Dr. Allen’s testimony and Report indicate that Dr. Allen developed his grouping methodology solely for the purpose of this litigation, which perhaps explains why it is not peer reviewed. Allen Rep. at 3-4, 8-9; Allen Tr. I 42:11-14. Because Dr. Allen’s methodology was not based on “pre-litigation” research, and not subjected to peer review, Dr. Allen must “explain precisely how he went about reaching his conclusions and point to some objective source—a

⁴ “Q. Are there any industry standards or guidelines that inform the process that you used to reduce the 30 lamps to the list of seven lamp types? A. Not that I know of.”

learned treatise, the policy statement of a professional association, a published article in a reputable scientific journal, or the like—to show that he has followed the scientific method, as it is practiced by (at least) a minority of scientists in his field.” *Daubert II*, at 1318-19.

Dr. Allen likely did not cite to any support for his methodology because none exists. Cree’s witnesses and experts with relevant experience in the lighting industry testified that they are unfamiliar with and have never encountered Dr. Allen’s methodology. Vollers ¶¶ 71, 98; Pattison ¶¶ 58-67. Dr. Allen’s methodology of grouping Cree LED Lamps for common analysis, which he appears to have developed for the purpose of this litigation, is thus not sufficiently reliable to meet *Daubert* standards. See, e.g., *Daubert II*, 43 F.3d at 1319; *Colon v. BIC USA, Inc.*, 199 F. Supp. 53, 75-76 (S.D.N.Y. 2001)(collecting cases that novel, untested engineering methodologies are inadmissible). Because his methodology is unreliable, Dr. Allen’s opinion that Cree LED Lamps can be grouped into Lamp Architectures for common analysis is inadmissible.

B. Dr. Allen did not reliably apply his “Lamp Architecture” methodology to the facts of this case.

Even if Dr. Allen’s method of sorting Cree LED Lamps into Lamp Architectures for common analysis were valid, which it is not, Dr. Allen did not reliably apply it to the facts of this case because Dr. Allen ignored known differences between Lamps within each Lamp Architecture. Specifically, Dr. Allen recognized in his deposition testimony that the design of and components used in LED lamps has changed significantly between 2013, when Cree LED Lamps were introduced to the market, and today, but did not account for those changes in his classification of Lamps. Allen Tr. I 43:11-23; 45:5-14; 47:25-48:3. For example, Dr. Allen groups the FT9.5 Lamp, which is a first-generation A19, with the FT9.0, which is a second generation A19. Allen Rep. at 2-3 (Tables 2 and 3); Vollers ¶ 100. Not only do these lamps have different wattages (9.0 vs. 9.5 watts), but their heatsinks are different sizes and shapes, and they incorporate different

LEDs. Vollers ¶ 100.

Dr. Allen also inappropriately grouped together Lamps of different wattages and color temperatures within each Lamp Architecture. For example, the FT19 Lamp Architecture includes 40-, and 60-watt replacement Lamps. Allen Rep. at 2-3 (Tables 2-3), 42-43; Vollers ¶ 77. Different wattages of Cree LED Lamps have different thermal characteristics. Vollers ¶ 75; Pattison ¶¶ 99-100. In fact, the thermal characteristics of Lamps within one Lamp Architecture of different wattages are so different that ENERGY STAR requires a different submission for each wattage. Vollers ¶ 76. This mistake was glaringly obvious once Dr. Allen amended his opinions in his California rebuttal and opined that the 40W does not fail prematurely but the 60W does, despite both lamps being in his FT19 Lamp Architecture.

b. Dr. Allen’s “Target Maximum” methodology is inadmissible.

Dr. Allen’s opinion that Cree LED Lamps will commonly fail within 6,000 hours fares no better. Specifically, Dr. Allen’s methodology of comparing the thermal performance of Cree LED Lamps against arbitrary “Target Maximum” operating temperatures is not reliable because the “Target Maximums” are based upon Dr. Allen’s personal beliefs and not supported by a single outside source. Nor did Dr. Allen review sufficient facts or data when developing his methodology or opinions. Specifically, he inspected too few samples of Cree LED Lamps, and the samples he analyzed are of unknown provenance and chain of custody. Finally, Dr. Allen did not reliably apply his “Target Maximum” methodology to the facts of this case because he failed to establish causation between the purported “defect” he identified and alleged lamp failures. Dr. Allen also intentionally ignored all contradictory evidence that Cree LED Lamps have been on the market for six years and have not commonly failed within 6,000 hours.

c. Dr. Allen’s methodology of comparing Cree LED Lamps against arbitrary “Target Maximum” operating temperatures is not reliable.

Dr. Allen concluded that Cree LED Lamps will commonly fail within 6,000 hours by employing a methodology he created for this litigation: Dr. Allen compared the thermal performance of the LEDs, electrolytic capacitor, and heat sink of Cree LED Lamps against “Target Maximums” that Dr. Allen believes are optimal. Allen Rep. at 41-46. Specifically, Dr. Allen opines that Cree should have designed its Lamps to operate the LEDs at 20° C (or 68° F) below the LED manufacturers’ rated operating temperature, the electrolytic capacitor at 10° C (or 50° F) below the manufacturers’ rated operating temperature, and the heat sink at 75° C based on a “guideline” that Dr. Allen developed in his own LED lamp development solely to keep the touch point, or external temperature, of the lamp sufficiently low that a consumer could touch the surface without experiencing physical pain. Allen Rep. at 32-33. Dr. Allen admits there is no industry standard for maximum temperature of a heat sink, and he does not cite to any sources that recommend temperature thresholds. *Id.*

Dr. Allen does not cite to even one source that supports his “Target Maximums.” Allen Tr. I 111:24-112:13. Like Dr. Allen’s methodology for grouping Cree LED Lamps, Dr. Allen’s utter failure to cite to a single source supporting his methodology is fatal. *Daubert II*, at 1315-16; *Colon*, 199 F. Supp. at 75-76. These “Target Maximums” do not meet any of the *Daubert* indicia of reliability: they are not peer reviewed or tested, have no known rate of error, and have not been accepted by the lighting community. *Daubert I*, 509 U.S. at 593-94. In fact, Cree’s expert and fact witnesses testified that they have never heard of Dr. Allen’s “Target Maximum” methodology, and that the industry standard methodology for LED lamp design permits designers to rely upon the component manufacturers’ specifications for components’ rated lifetimes. Vollers ¶¶ 79.

Dr. Allen’s testimony and Report indicate that Dr. Allen developed his “Target Maximum” methodology solely for the purpose of this litigation, which perhaps explains why it is not peer

reviewed. Allen Rep. at 66; Allen Tr. I 42:11-14. Because Dr. Allen’s methodology was not based on “pre-litigation” research, and not subjected to peer review, Dr. Allen must “explain precisely how he went about reaching his conclusions and point to some objective source—a learned treatise, the policy statement of a professional association, a published article in a reputable scientific journal, or the like—to show that he has followed the scientific method, as it is practice by (at least) a minority of scientists in his field.” *Daubert II* at 1318-19. Dr. Allen did not even attempt to do so, so his opinions must be excluded.

Rather than meeting the scientific rigor required under *Daubert*, Dr. Allen acknowledged in both his Report and his deposition testimony that his “Target Maximums” reflect his personal preferences. Allen Rep. at 66; Allen Tr. I 111:6-112:13; Pattison ¶¶ 60, 129. Dr. Allen further admitted that these personal preferences are “conservative” design targets. Allen Rep. at 4, 29, 32, 42-44; Allen Tr. I 109:11-24, 111:6-112:13. Dr. Allen’s personal design preferences cannot form the basis of an admissible expert opinion. *Daubert II*, 43 F.3d at 1319 (holding an expert’s personal opinion is not sufficient to meet *Daubert* standards); *In re Rezulin Prods. Liab. Litig.*, 309 F. Supp. 2d 531, 543 (S.D.N.Y. 2004)(excluding experts’ personal, subjective views under Rule 702).⁵ Because Dr. Allen’s “Target Maximum” methodology is not reliable, his opinion that Cree LED Lamps will commonly fail within 6,000 hours because Cree LED Lamps exceed his “Target Maximums” is inadmissible.

⁵ See also *Turpin v. Merrell Dow Pharms., Inc.*, 959 F.2d 1349, 1360 (6th Cir. 1992) (excluding an “expert” opinion because “[p]ersonal opinion, not science, is testifying here.”); *In re Bard IVC Filters Prods. Liab. Litig.*, No. MDL 15-02641-PHX DGC, 2018 WL 775295, at *2 (holding that an engineer’s testimony that device failure rates were “unacceptably high” reflects a subjective personal belief that is not an appropriate expert opinion); *In re Trasylol Prod. Liab. Litig.*, No. 08-MD-1928, 2010 WL 1489793, at *8-9 (S.D. Fla. Feb. 24, 2010) (excluding opinions under Rule 702 where they were based on subjective beliefs rather than any objective standard or specialized knowledge); *Hines v. Wyeth*, 2011 WL 2680842, Civ. No. 2:04-0690 at *2 (S.D. W. Va. July 8, 2011) (refusing to admit an expert’s personal opinion in a product liability case when the expert did not cite to a “single rule or regulation that would require defendants to act as she suggests,” or provide any other basis for her opinion.).

Dr. Allen claims that he had to invent his “Target Maximums” methodology for the purpose of this litigation because there is no industry standard to predict lifetime reliability of LED lamps. Allen Rep. at 66. Not so. As the *Young* court aptly noted, “There are ample accepted peer-reviewed and vetted industry standards for reliability testing based on long-term durational testing of a large number of LED lamps That Dr. Allen disagrees with these standards does not mean that they are irrelevant” *Young*, 2021 WL 292549, at *11.

A. Dr. Allen acknowledges flaws in his methodology.

Notably, Dr. Allen agrees that his “Target Maximum” methodology cannot actually predict the expected lifetime of Cree LED Lamps. Although Dr. Allen boldly predicted in his Report that all “Cree LED Lamps share a common defect” and because of this “will experience premature, catastrophic failure” in “about 1,500 hours to about 6,000 hours of operating time,” Allen Rep. at 3, Dr. Allen admits that his methodology does not permit him to predict whether a particular Lamp will fail, or how many Lamps out of a larger population will fail. Allen Tr. I 17:25-18:20, 22:11-17, 95:10-18. Instead, Dr. Allen testified that to predict actual failure rates based upon a purported “defect,” he would have to test a large number of lamps over a long period of time, which he admits did not do, despite having been retained well over a year ago. Allen Tr. I 17:25-18:20.

Unlike Dr. Allen’s truncated thermal testing and comparison against Target Maximums, the lighting industry has accepted long-term durational testing of larger numbers of LED lamps as the industry standard. Those industry-standard tests include 6,000-hour testing required for ENERGY STAR qualification. Vollers ¶¶ 21-23, 83-88. Such testing is peer reviewed, generally accepted, and has a known error rate. *Id.* Cree successfully conducted that industry-standard testing before it began selling Cree LED Lamps to consumers, and Dr. Allen reviewed the results of that testing showing that Cree LED Lamps did not commonly fail in those tests. Allen Tr. I 78:23-79:12. Dr. Allen is correct that the long-term testing on a larger population of lamps would

have been the correct approach, Allen Tr. I 17:25-18:11; Dr. Allen’s methodology is fatally flawed, and his opinions are inadmissible. *See, e.g., In re Bausch & Lomb, Inc. Contact Lens Solution Prods. Liab. Litig.*, 2009 WL 2750462, MDL No. 1785 (D.S.C. Aug. 26, 2009) (finding an expert’s opinions inadmissible when the expert relied upon untested methodology to reach a result that a product was defective, which was directly contradicted by the contact lens solution manufacturers’ test results under industry-standard tests that the product performed as expected).

B. Dr. Allen did not rely upon sufficient facts or data to develop his opinion that Cree LED Lamps will commonly fail.

Not only is Dr. Allen’s methodology unreliable, but Dr. Allen relied upon insufficient facts and data when applying his methodology to determine that Cree LED Lamps will commonly fail. Specifically, Dr. Allen’s sample of 10 Cree LED Lamps—none of which had failed—is woefully inadequate. Dr. Allen did not attempt at all to explain why it was appropriate for him to inspect only 10 Cree LED Lamps and extrapolate his findings to the class, which renders his opinion inadmissible. *Grodzitsky v. Am. Honda Motor Co.*, No. 2:12-cv-001142-SVW-PLA, 2017 WL 8943159, at *3-4 (C.D. Cal. Oct. 30, 2017), *aff’d*, 957 F.3d 979 (9th Cir. 2020)(excluding an expert’s opinion in a case related to defective window regulators in Honda Pilots when the expert analyzed only 26 window regulators—12 of which had failed—and extrapolated his findings to over 440,000 Honda Pilots); *SEC v. Lek Securities Corp.*, 370 F. Supp. 3d 384, 418 (S.D.N.Y. 2019)(excluding expert testimony when it was based upon 8 example trades out of 675,504 potentially problematic trades because the sample was not representative). Nor did Dr. Allen address the statistical significance of the sample he tested in any way. *See, e.g., Apple v. Atlantic Yards Dev. Co., LLC*, No. 11-cv-5550-CBA-SMG, 2015 WL 11182422 at *9 (E.D.N.Y. Mar. 31, 2015)(excluding an expert’s opinion when the expert did not establish that the sample he tested was statistically significant.”); *Grodzitsky*, 2017 WL 8943159 at *4. (“In order to make this sort

of probabilistic claim about a larger population based on an inspection of a smaller subset, some minimal level of statistical significance needs to be met.”). Dr. Allen’s sample size and failure to address statistical significance renders his opinion inadmissible..

Not only did Dr. Allen inspect a miniscule sample of Cree LED Lamps, but the sample set that he inspected represents only a fraction of the total models of Cree LED Lamps that Cree has manufactured. Dr. Allen admits that LED technology has continuously improved since LED lamps were introduced to the market, meaning that Lamps within a product line that are manufactured later in time are likely to perform differently than earlier versions of lamps. Allen Tr. I 43:15-45:14. Dr. Allen did not test multiple versions or manufacturing lots of Cree LED Lamps, however, opting instead to test just one or two samples from each “Lamp Architecture” from a single manufacturing week.⁶ Dr. Allen’s sample set is not, therefore, representative of the class.

Finally, Dr. Allen purchased the Cree LED Lamps that he tested primarily from third-party sellers on Amazon.com. Allen Tr. I 58:3-14. In some instances, Dr. Allen purchased Lamps that Cree manufactured in 2013 or 2014 nearly 6 years after manufacture.⁷ Dr. Allen did not provide any information whatsoever about where and how those Lamps were stored in the intervening period between manufacture and delivery to Dr. Allen. Allen Tr. I 58:3-21. Dr. Allen cannot, therefore establish requisite chain of custody to prove that the samples he tested are authentic and unchanged from the time of manufacture. Fed. R. Evid. 901(a) (explaining that the proponent of evidence must authenticate the evidence).

d. Dr. Allen did not reliably apply his “Target Maximum” methodology to the facts of this case.

Even if Dr. Allen’s “Target Maximum” methodology were a reliable methodology for

⁶ See, e.g., Allen Rep. at 41 (Table 6).

⁷ See, e.g., Allen Tr. I 92:21-93:6.

predicting failures of Cree LED Lamps, which it is not, Dr. Allen did not apply it reliably.

A. Dr. Allen did not establish causation between the purported common defect and failure of Cree LED Lamps.

Dr. Allen's Report and testimony are utterly devoid of any analysis of causation; although Dr. Allen identified a purported defect, he did not provide the Court with any analysis of how that purported defect could cause catastrophic failures of Cree LED Lamps. Dr. Allen did not analyze any Cree LED Lamps that failed, or test Cree LED Lamps for any appreciable length of time to determine whether the Cree LED Lamps would catastrophically fail if operated for a year, as he hypothesized. Allen Tr. I 17:25-18:20. The Court is not required to accept opinions that are connected to underlying data "only by the ipse dixit"—or unproven statement—"of the expert." *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997) (holding that it is incumbent upon the Court to exclude testimony if "there is simply too great an analytical gap between the data and the opinion proffered."). Because Dr. Allen did not include any analysis to prove that the purported defect that he identified will cause catastrophic failures, the Court should exclude his opinion.

Although Dr. Allen limits his opinions to catastrophic failures, in reality, if the components on which Dr. Allen focused his analysis experienced excessive temperatures, they would be unlikely to cause catastrophic failure of Cree LED Lamps. Specifically, Dr. Allen opined that Cree LED Lamps caused LEDs to operate above their rated temperature. Allen Rep. at 3, 41-46. Operating LEDs above their rated temperature can cause premature lumen degradation, which means the Lamp will emit less light, or color shift, which means that the color temperature of the Lamp may shift warmer or cooler. Vollers ¶ 115. Under both of those conditions, however, the Lamp will continue to emit light. Vollers ¶ 115. These are not catastrophic failures.

The same is true of the electrolytic capacitors. Dr. Allen opines that Cree LED Lamps operate at a temperature that will cause electrolytic capacitors to commonly fail, but does not

explain how a failure of an electrolytic capacitor could cause a catastrophic failure of the Lamp. Allen Rep. at 3, 46. If the electrolytic capacitors in Cree LED Lamps operate at elevated temperatures and fail prematurely, the Lamp will not catastrophically fail. Vollers ¶ 116. Rather, the Lamp will likely flicker at a frequency that most humans cannot perceive. *Id.* This, again, is not the type of failure that Dr. Allen predicts. Allen Rep. at 3.

B. Dr. Allen assumed that Cree LED Lamps are defective and ignored contradictory data of actual failure rates and ongoing reliability testing results.

Rather than approach this assignment with the open question of whether Cree LED Lamps are defective, Dr. Allen testified that he assumed from the beginning that Cree LED lamps were defective. Allen Tr. I 84:2-24. Dr. Allen assumed this because (i) counsel provided him with an “inference” that Cree LED Lamps experienced a high failure rate, and (ii) he assumed Cree would not have been sued if its lamps were not failing at a high rate. Allen Tr. I 84:2-24. Dr. Allen then admitted that he did not independently confirm whether Cree LED Lamps were actually failing at a higher than expected rate, even though he had access to documents that show that the failure rate has never consistently exceeded 2%. Allen Tr. I 78:4-79:12, 91:20-92:7, 95:3-97:3.

At his deposition, Dr. Allen perplexingly testified that the fact that Cree LED Lamps, which have been on the market for more than 6 years and were tested for 6,000 hours for ENERGY STAR qualification, have not historically failed within one year of operation has absolutely no bearing on his opinion. Allen Dep. at 22:23-25:21. It is inappropriate for Dr. Allen to assume that the mere fact that plaintiff filed this litigation proves plaintiff’s claim. *Mesfun v. Hegos*, 2005 WL 5956612, No. CV 03-02182 MMM (RNBx) at *11 (C.D. Cal. Feb. 16, 2005) (holding that an expert may not base his opinions on assumptions about motivations that led to the filing of litigation). Nor should Dr. Allen have merely accepted counsel’s statement that Cree LED Lamps were defective, *Niang v. Mukasey*, 511 F.3d 138, 146 (2d Cir. 2007) (finding that an expert cannot

rely on unjustified assumptions of his client), especially in the face of evidence to the contrary. *Lava Trading, Inc. v. Hartford Fire Ins. Co.*, No. 03-cv-7037-PKC, 2005 WL 4684238 at *16 (S.D.N.Y. Apr. 11, 2005)(excluding an opinion based on a method that is “designed to avoid confronting self-interested theory with measurable facts.”). Rather than test or confirm assumptions (or “inferences,” as Dr. Allen describes them) that counsel gave him, Dr. Allen appears to have backed into a conclusion that supported the assumption that Cree LED Lamps are defective before he began his analysis, which does not pass muster under *Daubert*.

Admittedly, this contradictory evidence alone would ordinarily go to the weight, and not the admissibility of Dr. Allen’s opinions. When combined with the overwhelming flaws in Dr. Allen’s methodology, however, Dr. Allen’s failure to consider contradictory evidence renders his opinion inadmissible. *See, e.g., Grodzitsky*, 2017 WL 8943159 at *3 (“Any one of these deficiencies [related to insufficiency of data in an expert report] would raise doubts as to the admissibility of [the expert’s] testimony, but acting in concert, they are fatal.”).

e. Dr. Allen’s opinion that the third-party studies prove a common defect in Cree lamps should be stricken.

Dr. Allen’s summaries of third-party studies that used a different methodology to test LED lamps are similarly not helpful to the fact finder and should not be admitted for several reasons: (i) Dr. Allen inappropriately assumes that specific lamps in the CPUC Study are Cree lamps; (ii) Dr. Allen ignores the limitations of the CPUC and Narendran Studies; and (iii) the CPUC Study does not have application outside of California.

A. The CPUC Study does not establish new industry standards.

Dr. Allen urges this Court to find that the methods in the CPUC Study—which Dr. Allen admits he did not apply in his own testing—supplant the heavily vetted industry standards for testing LED lamps, and that the CPUC Study definitively establishes that Cree LED Lamps will

fail prematurely. This Court should decline to do so, as the CPUC Study is not a final, definitive study that establishes a new, peer-reviewed and generally accepted industry standard. Rather, it describes an experiment that the CPUC performed to determine what additional research could be done in the future to augment existing industry standards. CPUC Study § 6.1. Dr. Allen’s opinion that the CPUC Study somehow establishes a common defect is, therefore, inadmissible. *See, e.g., In re Rezulin Prods. Litig.*, 309 F. Supp. 2d 531, 562 (S.D.N.Y. 2004)(refusing to admit an expert’s opinion based on an interim, non-peer reviewed study). Indeed, like in *In re Rezulin Products*, Dr. Allen’s reliance on the CPUC Study “was not based on the scientific method but on the expediencies of this particular litigation,” and should thus be excluded. *Id.*; *see also Amorgianos v. Nat’l R.R. Co.*, 137 F. Supp. 2d 147, 188 (E.D.N.Y. 2001)(excluding an analysis of published studies that was created for litigation rather than as a part of academic research).

B. Dr. Allen makes unfounded assumptions about the identity of lamp manufacturers in the anonymous CPUC Study.

The CPUC Study anonymized the manufacturers of the lamps it tested and identified them in the Study’s appendices only by Make Number and other attributes like lumen output, input wattage, and ENERGY STAR qualification, yet Dr. Allen definitively states that he knows that Cree is the manufacturer of Make #5 in the CPUC Study. Make #5—coincidentally and consistent with the assumptions Dr. Allen was given that Cree lamps fail prematurely—performed worse than other models in the Study. Dr. Allen’s opinions as to the identities of anonymous lamp manufacturers in the CPUC Study are based on unfounded assumptions and speculation that render his opinions unreliable. *See, e.g., S.E.C. v. Lek Securities Corp.*, 370 F. Supp. 3d 384, 412 (S.D.N.Y. 2019) (excluding expert testimony that “improperly invites the jury to speculate”).

Dr. Allen has no personal knowledge of the data underlying the CPUC Study. He did not participate in or author the CPUC Study, and did not have special access to data outside of the

published results. Allen Tr. II 47:21-48:3, 50:11-18. Nor does he have direct knowledge from the CPUC of which lamp manufacturer produced each make in the Study; indeed, Dr. Allen attempted to learn that information from the CPUC by emailing the principal investigator, and the CPUC declined to disclose the anonymous lamp manufacturers in the Study. Allen Tr. II 48:4-23.

Despite having no personal knowledge of the identities of the anonymous lamp manufacturers, Dr. Allen claims that Cree was one of the manufacturers in the CPUC Study because the Study contains a photo of a Cree lamp, and then states definitively that Cree is the manufacturer of the lamps identified anonymously as “Make #5.” Allen Rep. at 20-21. Dr. Allen testified that he did so by analyzing the lamp attributes listed in Appendix 1 of the Study and comparing it against some unknown set of documents or data that he did not produce, list or describe in his Report, or recall during his deposition.⁸ Allen Tr. II 59:9-61:5. Notably, Dr. Allen could not identify even a single other lamp manufacturer on Appendix 1, but he was certain that Make #5 was Cree off the top of his head. Allen Tr. II 61:6-63:23.

Cree employee Jon Vollers, who is logically more familiar with the attributes of Cree lamps than Dr. Allen, reviewed the attributes in the appendices to the CPUC Study and could not definitively conclude that Cree is the manufacturer of Make #5. Vollers ¶¶ 139-143. Specifically, Mr. Vollers noted that some of the attributes for Make #5, including compliance with California’s LED lamp quality specifications, do not line up with the attributes of Cree’s consumer products, and that he would need more information to tell whether Cree is the manufacturer of Make #5. *Id.* Dr. Allen should not be permitted to speculate freely about behind-the-scenes information of a

⁸ To the extent Dr. Allen attempts to submit a rebuttal that supplements his Report with the documents he purportedly relied upon or methodology he purportedly used to identify Cree as the manufacturer of Make #5 in Appendix 1, that rebuttal will be an improper supplementation and not a rebuttal, and would properly be stricken, just as Dr. Allen’s improper rebuttal was stricken in *Young*.

published study. *See, e.g., Pacific Life Ins. Co. v. Bank of NY Mellon*, 17-cv-1388-KPF, 2021 WL 673479 at *19 (S.D.N.Y. Feb. 22, 2021) (excluding speculative expert opinions).

C. Dr. Allen ignores explicit limitations on the CPUC and Narendran Studies’ application.

Even if Dr. Allen could prove that Cree manufactured Make #5, which he has not done, his use of the CPUC Study to prove a common defect in this litigation is prohibited by the Study itself. Dr. Allen attempts to use the CPUC Study to prove that Cree lamps will commonly fail prematurely in residential applications. The CPUC Study’s authors, however, expressly admonish that the CPUC Study must not be interpreted in that way. Indeed, the authors stated that “the switching cycles used in [their] stress testing **were not explicitly designed to reflect common or typical switching patterns in the field.**” CPUC Study § 6.1. Accordingly, the authors admonished that “the overall failure rates observed in this study **should not be interpreted as those that would be reasonably expected from typical residential applications in the field.**” *Id.* Further emphasizing that point, the CPUC authors stated, “**To be clear, it was not the objective of this study to simulate the typical switching patterns in California homes or their impact on LED lamp life . . . and our results should not be interpreted as such.**” *Id.*

But the CPUC authors did not stop there; they then explained that they “lack[ed] the primary data necessary to reasonably extrapolate [their] lab-based results to the populations of LEDs installed in California homes and **therefore cannot reasonably estimate the extent to which current LED rated life estimates are overstated.**” CPUC Study § 6.2. The authors elaborated by highlighting the “key uncertainties” of the CPUC Study. CPUC Study § 6.3. First, they note that they are not able to “reasonably project the failure rates” of LED lamps without additional research. Then, the authors note that the specific fixtures used in the study were “**not representative,**” and they were uncertain as to the “degree to which the specific characteristics of

the fixtures and luminaries used for [their] testing differ from those most commonly found in California homes.” *Id.* Next, the CPUC authors admonish that the “operating temperatures used in [the CPUC Study] were based on test lamps in four specific luminaire models **which are not necessarily representative** of the most common fixtures and luminaires installed in California homes,” and that further research is needed to “verify that the laboratory-based measurements of operating temperature reasonably approximate those that lamps experience in the field” Finally, the CPUC authors note that the switching cycles they used in stress testing were “**not explicitly designed to reflect common or typical switching patterns in the field,**” and they cannot “directly assess[] the representativeness” of the switching cycles used. *Id.*

All told, the CPUC authors admonish readers **at least seven times** that the CPUC Study was not meant to replicate typical residential use of LED lamps and should not be interpreted as a quantification of any impact of on-off switching on LED lamp life. And yet, Dr. Allen asks this Court to do just that by relying on the anonymized CPUC Study to demonstrate that Cree lamps will fail prematurely in a specific, quantifiable amount of time. Dr. Allen’s opinions that the CPUC Study can be stretched beyond its express limitations should be excluded.

Similarly, the Narendran Study does not develop or employ a test method that can currently be used to predict lifetime using on-off switching, but rather concludes that “a shorter time test procedure can be developed.” Vollers ¶ 152. It also explains that “overstressing” lamps in on-off switch testing “will introduce additional failure modes that may not be present in typical applications and could lead to underestimating system lifetimes.” Vollers ¶ 158.

D. The CPUC Study analyzed lamps that were specific to California.

Dr. Allen asks this Court to apply the results of the CPUC Study—which analyzed lamps purchased in California—to a New York class of consumers. He should not be permitted to do so,

as comparing California and New York LED lamps is comparing apples and oranges. *Baker v. Urban Outfitters, Inc.*, 254 F. Supp. 2d 346, 354 (S.D.N.Y. 2003) (excluding an expert’s testimony when she engaged in an “apples and oranges” comparison). California, unlike New York, has its own quality specifications for LED lamps that impose requirements greater than ENERGY STAR requirements. Pattison ¶ 116. Specifically, in 2015, when the CPUC purchased the lamps included in its Study, California had a Voluntary California Quality LED Specification (the “CA Quality Spec”). CPUC Study § 2.1. Cree adhered to the CA Quality Spec. Vollers ¶¶ 130, 140-141. In order to do so, Cree manufactured certain lamps specifically for sale to California retailers. Vollers ¶ 130. Those lamps had different attributes than lamps sold to other states, including New York. *Id.* Specifically, Cree’s California-specific lamps’ optics were more opaque than lamps manufactured for sale into other states in order to meet California’s requirements. *Id.* Because the lamps were more opaque, Cree’s California-specific lamps had higher input wattage. *Id.* Per the CPUC Study, the CPUC researchers purchased lamps off the shelf in retail stores, CPUC Study § 4.2; if the CPUC purchased Cree lamps at brick-and-mortar stores in 2015, they likely would have purchased California-specific opaque lamps. Those lamps are very unlikely to have been available in New York. *Id.* The lamps in the CPUC Study are not, therefore, the same lamps that the putative New York class purchased, and the CPUC Study has no bearing on this case. *See, e.g., Amorgianos v. Nat’l R.R. Co.*, 137 F. Supp. 2d 147, 188 (E.D.N.Y. 2001) (excluding an expert’s opinion when articles that the expert relied upon did not “fit” the facts of the case because they studied patients with different conditions than the patients at issue in the case).

III. CONCLUSION

For all the reasons stated above, Dr. Allen’s opinions should be stricken.

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Charlotte, North Carolina

Respectfully submitted,

KATTEN MUCHIN ROSENMAN LLP

By: /s/ Rebecca K. Lindahl

Craig A. Convissar
575 Madison Avenue
New York, NY 10022
craig.convissar@katten.com
Ph: 212-940-6369
Fax: 212-940-8776

Stuart M. Richter (admitted *pro hac vice*)
2029 Century Park East, Suite 2600
Los Angeles, CA 90067-3012
stuart.richter@katten.com
Ph: 310-788-4400
Fax: 310-712-8434

Rebecca K. Lindahl (admitted *pro hac vice*)
550 S. Tryon Street, Suite 2900
Charlotte, NC 28202
rebecca.lindahl@katten.com
Ph.: 704-344-3141
Fax: 704-344-2277

Charles A. DeVore (admitted *pro hac vice*)
525 West Monroe Street
Chicago, IL 60661
charles.devore@katten.com
Ph: 312-902-5478
Fax: 312-902-1061

Attorneys for Defendant Cree, Inc.

